Table 48a Influence of research and development costs on IT-based innovation for innovators, by selected company characteristics: 2001 (Frequency)

Characteristic	Total	Incentive/deterrent			Names
		Incentive	Deterrent	Neither	Nonresponse
Innovators ¹	34,200	10,000	11,700	11,700	700
ΙΤ	7,000	1,900	2,700	2,200	S
Manufacturing	1,500	400	600	500	S
Communication	1,200	300	500	400	S
Computer related services	4,300	1,200	1,600	1,400	S
Non-IT	27,200	8,200	9,000	9,500	S
Manufacturing	15,100	5,500	4,800	4,600	S
Transportation & public utilities	3,600	700	1,400	1,400	S
Finance, insurance & real estate	6,900	1,600	2,200	2,900	S
Engineering & AAB services	1,500	300	600	600	S
By revenue size					
\$2.5M to \$4.9M	11,400	3,400	3,700	3,800	S
\$5M to \$9.9M	8,000	2,400	2,700	2,700	S
\$10M to \$24.9M	7,600	1,900	2,500	3,100	S
\$25M to \$50M	3,500	1,100	1,300	1,000	S
Above \$50M	3,700	1,100	1,400	1,100	S

¹ To be classified as an innovator, the company had to indicate that it had developed a product or process in the past 12 months or believed it would develop a product or process in the next 12 months as a result of IT-based innovation. The survey was conducted during the period July 2001–April 2002.

KEY: IT=information technology; AAB=accounting, auditing, bookkeeping; S=suppressed for reasons of reliability due to receiving less than 20 responses

NOTES: Responses are to question 16a: "Do you consider research and development costs as an incentive, a deterrent, or neither an incentive nor deterrent to IT-based innovation?" This question was only asked of innovators. Table excludes 5 volunteered responses of "both", representing 200 companies. Total nonresponse consists of item nonresponse and don't know responses.

IT is defined as the hardware and software that support the production or use of computer-based information systems, the infrastructure necessary to access such information systems, or data processing services. Companies are classified as IT or Non-IT based on their 4-digit SIC number. IT Manufacturing includes companies with SICs of 3571-3579, 3651, 3661-3679, 3895, 3823-3826. IT Communication includes companies with SICs of 4812-4822, 4833, 4841-4899. IT Computer related services includes companies with SICs of 7371-7379. Non-IT Manufacturing includes companies with SICs of 5091-3694, 3699-3822, 3827-3999. Non-IT Transportation & public utilities includes companies with SICs of 4011-4231, 4412-4789, 4911-4971. Non-IT Finance, insurance & real estate includes companies with SICs of 6011-6036, 6081-6153, 6159, 6162-6799. Non-IT Engineering & AAB services includes companies with SICs of 8711, 8721.

SOURCE: National Science Foundation, 2001 Information Technology Innovation Survey.